PSOCOPTERA RECORDS FROM THE ISLAND OF SAMOTHRAKI (N AEGEAN, GREECE)

Dilian Georgiev

Department of Ecology and Environmental Conservation, University of Plovdiv, Tzar Assen Str. 24, BG-4000 Plovdiv, Bulgaria, email: diliangeorgiev@abv.bg

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Abstract

A study carried out between 09.07.2017 and 14.07.2017 revealed nine species of barklice (Insecta: Psocoptera) on the Island of Samothraki. The specimens were collected by sieving the detritus or crushed tree bark particles or by beating the vegetation. All records are new to the island and North-East Greece, and one species, Liposcelis pearmani Lienhard, 1990, is new to the fauna of Greece.

Keywords: North Greece, Aegean Sea, Samothraki, Psocoptera, diversity.

Introduction

The barklice (Insecta: Psocoptera) of Greece were mostly studied in its southern and central regions, both mainland and the islands (Lienhard, 1998; Lienhard & Smithers, 2002; Lienhard, 2006; Hollier et al., 2011; Sziráki, 2013). There is no information on the species diversity of this insect group from the north-east part of the country.

Samothraki belongs to the group of the north Aegean islands. It is the third highest island (1611m.) in the Aegean Sea. Its biodiversity is represented by high endemism but is badly affected by the semi-wild goat herds grazing everywhere on its territory. In this short note I would like to present my findings on some insect species from the poorly known Order Psocoptera on Samothraki. All records are new to the island, and one species is new to the fauna of Greece.

Material and Methods

The study was carried out between 09.07.2017 and 14.07.2017 on Samothraki Island (Tab. 1, Fig. 1, 2). Psocoptera were collected by sieving the detritus or crushed tree bark particles by a sieve with 1 mm mesh width above white cloth, and by beating the vegetation. Specimens were then collected by wet brush, stored and after processing, deposited in the collection of the author. They were preserved in ethanol or glycerin when prepared on microscope slides, and identified in the laboratory. Species identifications and taxonomy follows Lienhard (1998).
Table 1. Localities on Samothraki where samples were taken (altitude in m a.s.l., leg. Georgiev)

<table>
<thead>
<tr>
<th>No</th>
<th>Date</th>
<th>Locality</th>
<th>Coordinates</th>
<th>Alt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>09.07.2017</td>
<td>Near the road from Paleopoli to Hora, small drying stream, <em>Platanus orientalis</em> forest, in a dead trunk of <em>P. orientalis</em></td>
<td>N 40°30′00.1&quot; E 25°31′30.1&quot;</td>
<td>33</td>
</tr>
<tr>
<td>2.</td>
<td>09.07.2017 and 11.07.2017</td>
<td>The yard of hotel Kastro near Paleopoli, in the building and detritus and bushes in the yard</td>
<td>N 40°30′11.6&quot; E 25°31′18.3&quot;</td>
<td>25</td>
</tr>
<tr>
<td>3.</td>
<td>10.07.2017</td>
<td>Rocky gorge with a small stream in <em>P. orientalis</em> forest north of Hora, detritus of <em>P. orientalis</em></td>
<td>N 40°28′51.3&quot; E 25°31′37.2&quot;</td>
<td>183</td>
</tr>
<tr>
<td>4.</td>
<td>10.07.2017</td>
<td>Same gorge, upstream of locality No 3, in a rocky niche, detritus of <em>P. orientalis</em> mixed with goat faeces among rocks</td>
<td>N 40°28′50.8&quot; E 25°31′39.2&quot;</td>
<td>209</td>
</tr>
<tr>
<td>5.</td>
<td>10.07.2017</td>
<td>Near the road Paleopoli-Kamariotissa, shrub area, branches of <em>Pyrus</em> sp., both from living trees and dry ones on the ground</td>
<td>N 40°30′05.9&quot; E 25°31′07.5&quot;</td>
<td>14</td>
</tr>
<tr>
<td>6.</td>
<td>12.07.2017</td>
<td>Above Therma near the path to the Fengari Peak, <em>P. orientalis</em> forest, in bark of living roots of <em>Castanea sativa</em></td>
<td>N 40°29′41.4&quot; E 25°36′10.6&quot;</td>
<td>98</td>
</tr>
<tr>
<td>7.</td>
<td>12.07.2017</td>
<td>Dry gorge at Pachia Ammos Beach, scattered tree vegetation, under bark of living <em>Olea europaea</em></td>
<td>N 40°23′50.5&quot; E 25°34′45.1&quot;</td>
<td>29</td>
</tr>
<tr>
<td>8.</td>
<td>13.07.2017</td>
<td>Near the road from Paleopoli to Hora, shrub area on a hill, branches of <em>Phillyrea latifolia</em></td>
<td>N 40°29′42.6&quot; E 25°31′51.3&quot;</td>
<td>130</td>
</tr>
<tr>
<td>9.</td>
<td>13.07.2017</td>
<td>Near the road from Paleopoli to Hora, dry gorge with maquis vegetation, detritus of <em>Quercus coccifera</em> among rocks and stones</td>
<td>N 40°29′45.5&quot; E 25°31′57.2&quot;</td>
<td>118</td>
</tr>
<tr>
<td>10.</td>
<td>14.07.2017</td>
<td>On the bank of the stream beneath the fort of Hora, grass and shrubs <em>Nerium oleander</em>, in detritus of dry grass</td>
<td>N 40°28′34.6&quot; E 25°31′32.4&quot;</td>
<td>201</td>
</tr>
</tbody>
</table>

Fig. 1. Location map of the investigated area and position of the localities surveyed on Samothraki Island (locality numbers correspond with those in Material and Methods).
**Results**

**Liposcelididae Broadhead, 1950**

**Liposcelis arenicola Günther, 1974**
Material examined: locality nr. 1, 1♀, collected by sieving.

**Liposcelis bostrychophila Badonnel, 1931**
Material examined: locality nr. 3, 1♀, 1 nymph, collected by sieving; locality nr. 9, 1♀, collected by sieving.

**Liposcelis decolor (Pearman, 1925)**
Material examined: locality nr. 5, 3♀, collected by sieving; locality nr. 6, 1♀, collected by sieving;

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*Fig. 2. Habitat types of some of the localities surveyed: A - stream with Nerium oleander, beneath the fort of Hora (nr. 10), B - hill with Phillyrea latifolia shrubs (nr. 8), C - Olive cultivation (nr. 7), D - north of Hora, rocky gorge with a small stream (nr. 4), E - the yard of hotel Kastro near Paleopolis (nr. 2), F - road Paleopoli to Kamariotissa, shrub area with Pyrus sp. (nr. 5), G - above Therma, Castanea sativa tree (nr. 6), H - dry gorge with maquis (nr. 9).*
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locality nr. 7, 1♀, 2 nymphs, collected by sieving.

**Liposcelis kyrosensis Badonnel, 1971**
Material examined: locality nr. 1, 1♀, collected by sieving.

**Liposcelis pearmani Lienhard, 1990**
Material examined: locality nr. 4, 9♀, 5♂, 3 nymphs, collected by sieving; locality nr. 9, 1♀, collected by sieving.

**New record for Greece.** The morphology of the specimens agrees with the original description by Lienhard (1998) especially the most important one – number of ommatidia of females was varying from 4 to 6. The body coloration of the specimen from the locality nr. 9 is paler than typical (Fig. 3).

**Liposcelis tricolor Badonnel, 1973**
Material examined: locality nr. 1, 1♀, collected by sieving.

**Trogiidae Badonnel 1951**

**Cerobasis guestfalica (Kolbe, 1880)**
Material examined: locality nr. 2, 09.07.2017, 1♂, collected by hand on plastic table, 11.07.2017, 1♀, collected by beating brunches of *Cupressaceae* tree; locality nr. 5, 3♀, collected by beating the vegetation; locality nr. 7, 1 nymph, collected by sieving; locality nr. 8, 1♂, collected by beating the vegetation.

**Lepinotus reticulatus Enderlein, 1904**
Material examined: locality nr. 2, detritus beneath *Nerium oleander, Rosmarinus officinalis*, and *Cupressaceae*, 09.07.2017, 3♀, 2 nymphs, collected by sieving; locality nr. 3, 5♀, 4 nymphs, collected by sieving; locality nr. 9, 2♀, 2 nymphs, collected by sieving; locality 10, 1 nymph, collected by sieving.

**Ectopsocidae Roesler, 1944**

**Ectopsocus vachoni Badonnel, 1945**
Material examined: locality nr. 3, 1♀, 1♂, collected by sieving.

![Fig. 3. General views of two females of *Liposcelis pearmani* from Samothraki Island, locality nr. 4 (A) and nr. 9 (B): first records of the species from Greece. Photographed in glycerin, 40x.](image-url)
Acknowledgements

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Literature